Page 5, Bell Atlantic's Identified Harm No. 14

Bell Atlantic's Statement:

AT&T's service certification proposal would entail separate certification of each service to run on the LEC network.

AT&T's Characterization of Bell Atlantic's Statement:

IN based-services run independently and with existing switched-based services. If new services are purchased by customers, feature interaction must be tested. The same is true for any new service, which requires that rigorous certification process be followed to include the following:

- Internal third party service testing
- SS7 interconnection certification testing with LEC
- IN certification testing with LEC

Bell Atlantic's Response:

Contrary to AT&T's claim, AIN services do not run independently from existing switch-based services. "When an AIN trigger is invoked, that trigger can take priority over many switched-based functions, including E911 emergency calls and operator calls." SBC Ex Parte 1/17/96

AT&T need only review documentation from the 5ESS switching system, as well as other manufacturer's products, to determine the interdependency of AIN services. Feature interaction between AIN and switch-based features is a critical problem. The manufacturer's literature demonstrates this. For example, the 5ESS documents interactions between feature packs and assignment of triggers. AT&T also ignores variations in implementation of a specific vendor's generic across multiple switches in a single LEC's network (as it would be assumed AT&T varies its implementations to advance new business opportunities). Such variations require real time mediation. The premise that one fits-all is not a reality.

AT&T must also accept the premise that its services will not be the only services available to a customer. AT&T indicates that IN service certification with the LEC is necessary, but remains silent on certification of services from multiple providers interacting with a new AIN service to be certified with the LEC. AT&T also fails to address how one service provider's service would be recertified when another provider makes an upgrade to its service or when network changes are made. It has been Bell Atlantic's experience with AIN that such transitions do not occur without difficulty. The existence of multiple AIN providers increases the complexity exponentially. As Bell Atlantic affirmed earlier, each service will require certification, but beyond certification, mediation is necessary to manage the many and complex issues associated with multiple AIN-based services and switch-based services residing on a single customer's line. For example, consider the impact on third party service provider's AIN service, if they are deployed when Dual-PIC is implemented. Such transitions are not trivial. Each provider's service will again have to be recertified and redeployed.

Page 5. Bell Atlantic's Identified Harm No. 15
Bell Atlantic's Statement:
AT&T inconsistently states that Phase II, which provides a consumer a choice between the LEC or an alternative third party service provider as the single provider of line-side AIN features does not require mediation.
AT&T's Characterization of Bell Atlantic's Statement:
AT&T's position is that all phases require mediation. Mediation functions exist today in the area of SS7 signalling at the SSP, STP and SCP. Other areas of mediation cover network management, security, performance, provisioning, and screening are sufficient assuming certain constraints. Existing mediation functions do not need to move to a single new network element for Phase 2.
Bell Atlantic's Response:
Bell Atlantic appreciates AT&T's acknowledgment that mediation is a necessity at all phases. Bell Atlantic cannot support the view that error procedures in the SSP and SCP constitute sufficient security to protect the proprietary information of multiple third parties accessing an incumbent LEC's network. See GTE's response to Identified Harm #3 and # 8 in this document and SBC Ex Parte 1/19\96.

Page 5, Pacific's Identified Harm No. 16&17
Pacific's Statement:
With the Off Hook immediate trigger, 91, Operator Services 10XXX dialing, and presubscription may not work, and with the Off Hook Delay trigger, the local network cannot guarantee end user access to operator services and the carrier override (10XXX) feature.
AT&T's Characterization of Pacific's Statement:
"Due diligence in joint negotiation, testing and provisioning between the third party IN service providers and the LECs will be necessary to ensure these scenarios function properly." (applies to both 16 & 17)
Pacific's Response:
While negotiation would be required when setting up third party access, the third party would have a vested interest in preserving both 911 and operator access, 10XXX dialing and presubscription. However, another third party service provider also having a business interest in such traffic may abuse its access to the same customer's line. Without effective per-call mediation of AIN call processing messages from third parties, the LEC would have no means of ensuring that these basic services (e.g., 911, operator services, presubscription and carrier override) would continue to be available as end users expect.

Page 6. Pacific's Identified Harm No. 18

Pacific's Statement:

The diagram used in AT&T's April 20th ex parte illustrates how end office trigger access can adversely affect end user expectations.

AT&T's Characterization of Pacific's Statement:

The sequence of trigger processing cannot be altered by the third party SCP provider. Also, the LEC has final control on trigger activation since it provisions the trigger...If a LEC suspects that a third party IN service provider is causing problems, they can deactivate the trigger(s) or the routing translations for that particular TT. Joint certification processes and agreements between IN service providers and LECs are necessary to ensure interoperability."

Pacific's Response:

AT&T does not directly respond to the concern of a third party service provider using an Off-Hook Delay trigger then bypassing subsequent triggers (and potentially other service providers) and call processing steps within the LEC switch. AIN allows response messages from the SCP to directly route a call, skipping other intermediate steps in the AIN model. The LEC would have no means to detect this until it received complaints from end-users. In the new environment, the LEC should not be placed in the position of arbitrating between IN service providers to remedy an end user's service difficulties. This would be especially difficult when the LEC has no detailed knowledge of the services provided by the third party (as has been suggested). Without per call mediation, network reliability and network service quality could suffer measurably before the LEC is able to detect a problem.

While certification and agreements between service providers and network providers (LECs) are a required first step, they do not provide any real-time assurance that the messages received by the LEC switch are consistent with such agreements. Only a real-time mediation function can ensure that the service provider is sending appropriate responses to AIN query messages.

Page 6, Pacific's Identified Harm No. 19
Pacific's Statement:
In effect, the scenarios described and advocated by AT&T would limit the end user to one service provider for local, long distance, and feature services such as CLASS services.
AT&T's Characterization of Pacific's Statement:
"The customer is not restricted to a single provider. The recommended approach is to have a single SCP provider per line as the near term arrangement. Customers will still have a choice of local and long distance providers independent of IN service providers. In addition, each SCP provider will be able to support multiple IN service providers..This allows the customer to obtain service from any and all IN service providers utilizing the same SCP provider. Service interactions with existing switch-based features provided through the LEC may occur..In this case, the two service providers will have to negotiate and are on the call flow for the customer. Any feature interaction scenarios should be discovered and resolved through joint certification and testing efforts."
Pacific's Response:
Continued on next page

The restriction Pacific refers to is not a technical one. It is difficult to imagine AT&T (as the IN service provider), returning a message to the LEC switch that would route a call to MCI or another of AT&T's competitors. The use of AIN call processing messages to bypass steps in call processing as a means of defeating a customer's PIC or 10XXX dialing has been described previously. This same concern applies here.

It is interesting to read AT&T's description of the potential for hosting multiple service providers from single SCP. This is , in fact, the proposal described in Pacific Bell's Enabling Services (described in June '95) approach to facilitating third party entry into the services competition. While Pacific Bell agrees that hosting multiple service providers from a single SCP is feasible, the configuration suggested by AT&T which uses a third party SCP, does not address or resolve the feature interaction or network issues we have repeatedly described associated with a third-party owned SCP without mediation. In contrast, the Enabling Services approach identifies and resolves feature interactions before services are deployed into the network.

It is also interesting to read that AT&T acknowledges that feature interaction between AIN based services and switch-based services are real. In previous ex parte statements they have denied such potential interactions. It is encouraging that AT&T seems to have adopted the position that such interactions must be managed and that this may require cooperation between service providers in developing the AIN logic to accommodate the customer's desired call flow. It is, however, frustrating that AT&T continues to minimize the need for continuous testing, relying instead on certification in place of of mediation. AT&T cannot possibly believe that a one-time certification of a service when it is developed and deployed would accommodate changes in switch software, upgrades to other network devices, indeed, even their own network facilities, all of which may impact the way an IN feature works and its interactions with switch-based features. LECs involved in AIN service deployment have experienced a constant need to re-evaluate the way an AIN service changes If a customers expectations are not managed by a real-time mediation function, all service providers service quality is at risk. Customers are not likely to retain services that do not operate as expected over time.

Page 6. SBC's Identified Harm No. 20

SBC's statement:

"... AT&T is arguing for unfettered, unrestricted access to the operating software embedded in LEC switches that decides how a call is to be processed (*i.e., switch triggers).*"

AT&T's Characterization Of SBC's Statement:

"AT&T proposes that the third party SCP be connected to a third party SS7 signaling network, not connected directly to the LEC network.

- LEC and third party embark on specifically designed hardware and software certification program for Third Party SCP
- LEC and Third Party engage in service application testing
- LEC accesses own software upon receiving a service order from Third Party
- LEC initiates work order

SBC's Response:

AT&T missed SBC's point altogether! The fact that the physical interconnection is provided via the Common Channel Signaling (CCS) network using the Signaling System 7 (SS7) protocol is not the point. It is the fact that AT&T proposes to assign switch-based AIN triggers directly to a third party's service logic without any form of logical meditation. This is what SBC is referring to as "unfettered, unrestricted access to operating software embedded in LEC switches" [4]. The mediation functions suggested by AT&T all deal with network protocol and routing of the signaling information. Content of the message is virtually unmediated. Perhaps an analogy will help clarify SBC's point. The only real control exerted in AT&T's plan deals with the addressing and routing of the signaling "envelope". The contents of the signaling envelope are unmediated in real-time. AT&T solution is to simply say, "I'm certified: nothing can possibly go wrong". SBC is concerned that once a LEC's AIN trigger is "hit", call processing is suspended until a response message is received from the SCP. If the contents of the response message are not inspected (logical mediation), the network and/or a customer's service or preferences are placed at significant risk. It is in this realm that SBC feels the risks far outweigh the potential delay that may be required for the industry to develop real-time mediation processes that would safeguard network security, customer's service integrity and overall network reliability.

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[4] Excerpted from SWBT's written Ex Parte dated January 11, 1996 as modified January 17, 1995 in CC Docket No. 91-346.

Page 6, SBC's Identified Harm No. 21

SBC's statement:

"Undiscovered or left unresolved, (those) problems would harm SWBT's public switched network and would negatively affect not only the AIN-subscribing customer, but other customers as well."

AT&T's Characterization Of SBC's Statement:

All problems will have to be resolved cooperatively through joint agreement and testing.

Through the assignment of a TT to each SCP provider, the issue of affecting other customer's calls is eliminated. If the SCP goes into overload, it sends an ACG message to the switch. Since the TT indicates that particular SCP provider in the routing, other service providers calls cannot be impacted.

SBC's Response:

AT&T's proposal to assign a Translation Type (TT) to each SCP provider is indicative of the overly simplistic approaches applied by industry participants when acting individually. Acting in cooperation with other industry players as suggested in the *LEC Proposal for an Industry IN Project* would have allowed AT&T to bounce its ideas off a broader panel of experts. Perhaps then it may have considered that TTs, which are a limited resource to begin with (256 available to support all SS7 applications; not just AIN) still do not prevent one third party service provider from affecting other service providers or customers. For example:

- Use of a TT only applies to routing of a query message to a database using Global Title Translations (GTT) - it does noting to control the flow of messages from the data base to the SSP.
- Absent appropriate mediation, a third party could send a Trigger Activation / Deactivation message to any SSP that would "turn-off" the trigger thus deactivating AIN services.
- Also, without mediation, there is nothing to prevent a third party from monopolizing the use of switch resources, *e.g.*, announcements, trunk groups, etc., thus impacting all customers; both AIN and non-AIN.

In addition, it is worth noting that some switch types, *e.g.*, 1A-ESS, currently do not support multiple TT for AIN. SWBT, as well as many other LECs, have a significant investment in this technology.

Page 7, SBC's Identified Harm No. 23

SBC's statement:

"Unmediated access to SSP switch triggers could negatively affect billing for AIN services. At present, several switch triggers require that billing information be returned from SCP service logic in order for an AMA billing record to be generated. An AIN provider could eliminate this information from a response, resulting in the local carrier's inability to bill correctly. Not only could the originating LEC lose access revenues, an AIN provider might cause the billing information to be lost on calls that are routed to its competitors." SBC Ex Parte Amended 1/17/96.

AT&T's Characterization Of SBC's Statement:

True, an IN service provider can modify the information contained in certain messages since the ISCP has the flexibility of changing some fields in the response messages it returns to the SSP. The capability to change billing parameters is built into IN to permit service provider to offer different flexible billing arrangements to customers (e.g. selective reverse billing based on calling party number). In addition, SUP signaling conveys billing information which switches along the way could potentially change independently of IN capabilities.

Joint service agreements/contracts between IN service providers and LECs will be necessary to ensure proper service functioning. In particular, testing is required to ensure billing is done properly.

SBC's Response:

AT&T understates the significance of this issue. While agreeing with SWBT that the issue exists, AT&T dismisses the concern as just another one of the situations that can be addressed by testing, agreements and contracts. SBC strongly disagrees.

While SBC would like to rely on administrative solutions to mediation issues, no amount of certification testing or contract language can adequately protect SBC and its customers from inadvertent or intentional misapplication of a technology such as AIN which can be so easily manipulated in real-time on a call-by-call basis. Only through the development of some form of real-time call-by-call mediation capability can network and service integrity, quality and reliability be assured.

Page 7, SBC's Identified Harm No. 24

SBC's statement:

"When an AIN trigger is invoked, that trigger takes priority over many switch-based functions, including E911 emergency calls and operator calls....In order for essential services such as E911 or Operator Assisted calls to continue to work universally, the AIN service needs to allow such feature interactions. Mediation would provide this assurance."

AT&T's Characterization Of SBC's Statement:

SSP digit analysis tables allow for certain call types (e.g. 0+/0-) and certain dialing sequences (e.g. 911) to be provisioned as escape codes which preempt AIN triggers. It is likely that LECs offering IN-based services today already have such provisioning in place and third party IN service providers will not be able to modify it.

SBC's Response:

AT&T suggests reliance on the use of escape codes to preempt AIN triggers switch level. More than likely however, operator requested calls (0-) would not be included as an escape code since some AIN services may require that 0- calls go to a database.

The escape codes provide for a specific digit string such as 911, 611, etc. but are not designed for "wild card" strings such like 0+. Escape codes operate at the switch level, they would always need to be treated the same even though AIN service providers may need to offer specialized services that deal with the codes in the SCP's service logic. Furthermore, escape codes only apply to certain AIN triggers, *e.g.*, Off Hook Delay (OHD), and do not prevent negative feature interaction when, for example, the Off Hook Immediate (OHI) trigger is used. SBC believes that these capabilities should be developed into a mediation function that provides third parties the flexibility they desire while, at the same time, ensuring that services using these codes are properly supported.

AT&T continues to overlook SBC's concern for the ability of E911 operators to be able to complete a call back to the originating E911 line. As outlined by SBC in its original Ex Parte, services enabled by a Terminating Attempt Trigger (TAT) could prevent the E911 operator from calling the E911 caller back. A mediation function needs to be developed to ensure this essential capability continues to be available.

SBC's experience with AIN service design indicates that this is not a trivial matter and must be dealt with. To date, SBC has had to work around this limitation by developing only those AIN services that avoid the issue since some switches, *e.g.*, 1A-ESS, cannot route an AIN call to the operator.

Page 7, SBC's Identified Harm No. 25

SBC's statement:

"At present, switch vendors do not uniformly support all trigger types, classes of service, and AIN releases."

AT&T's Characterization Of SBC's Statement:

Agree. This fact was determined in he AT&T/BellSouth test. The result is that some services would not be available in all geographies. This issue is no different for a LEC with its own heterogeneous network.

SBC's Response:

While AT&T agrees with SBC on this issue, it concludes that the only impact is a geographic restriction on service that is no different from what LECs experience today. In SBC's view, this issue goes well beyond what is being confronted in the network today.

Switch feature variations among vendors, variations in the actual generic installed in the network switches as well as the evolution of switching products and their features and functions have a significant impact on SBC's ability to roll-out AIN services. These same issues can have an even greater impact on a third party's service creation since the third party is not directly connected and may not have direct access to the technical experts that are available from switch manufacturers. SBC admits that these issues cannot be completely mitigated by mediation techniques. However, adequate mediation is necessary to protect the network when a third party's SCP provides a response to a local switch that is not compatible with the switch or its current software release and would therefore negatively impact the processing of the call and/or any of the customer's non-AIN services.

For example, SBC has more than 200 switches of a single switch type in its network. These 200 switches can have as many as five different generics at any point in time. In addition, software enabling specific services are not always deployed uniformly throughout SBC's market areas.

Page 7, SBC's Identified Harm No. 26

SBC's statement:

"AT&T further alleges that to implement mediation, new mediation devices will need to be added to the network... thereby increasing the cost of mediation...mediation function/requirements have not been defined by the industry. Therefore, it is premature to assume that new devices will be required."

AT&T's Characterization Of SBC's Statement:

AT&Ts position is that a new mediation device is not needed.

Any additional mediation functions and requirements should be identified so as to clearly address the need. New mediation functions should make use of the existing IN network elements (SSPs, SCPs, STPs).

SBC's Response:

While SBC is not specifically opposed to having the required functions embedded in existing network elements, its experience to date indicates that it will likely take longer and cost more to modify existing products that it would to develop and deploy new network elements. Nonetheless, it has not been determined whether or not mediation devices should be new network elements or enhancements to existing elements. This decision must ultimately be based on costs, performance, capacity and product delivery concerns.

Page 8, SBC's Identified Harm No. 27

SBC's statement:

"The Off Hook Delay (OHD) trigger is "hit" after the end user has gone off hook and has dialed his digits. With current technology, the LEC has the ability to load specific dialed digit strings that circumvent the local switch from initiating the AIN query to the IN service provider's SCP. (...) However, services such as 800/8XX service cannot be supported since all of the possible 800/8XX numbers would have to be delineated in the local switch's tables. Current technology is severely limited in its ability to perform the required 'positive screen' e.g., cannot screen 800-XXX-XXXX"

AT&T's Characterization Of SBC's Statement:

Certification testing is needed to ensure proper functioning of features/triggers which interact.

The OHD trigger will be "hit" for 800/8XX calls dialed from a subscriber with that trigger provisioned. However, before a query is launched the SSP will perform digit analysis on the dialed digits. The LEC may provision data in the digit analysis tables such that incoming digits 800/8XX can be defined as an escape code. This will preempt the query to an SCP and instead result in a query to an 800 database. Refer to item 24.

SBC's Response:

AT&T seems to have a different understanding of the capabilities of local switches than does SBC.

First, the escape code referenced by AT&T only preempts OHD triggers and not Off Hook Immediate (OHI) triggers. If an OHI trigger is activated, escape codes are never considered by the local switch. The OHI trigger takes precedence over the escape code. This is but one of the many service disruptions behind SBC's decision to not use the OHI trigger.

Second, while the escape codes used with the OHD trigger vary by switch type, they are office based escape codes. Therefore, any escape sequence will affect all calls within the switch in exactly the same manner.

Third, as already outlined, escape codes must be a delineated number string and may not be a "wild card" string, *e.g.*, 800 XXX-XXXX. Therefore, each and every specific 800 number would need to be included in each and every local switch's escape code table. This is not technically efficient even if it were possible.

Finally, certification and testing as the primary means of ensuring that features and triggers are functioning as intended as suggested by AT&T is inadequate. Per-call analysis of AIN messages in real-time is the only means to ensure continued universal support for all carrier services in the presence of third party AIN services.

ATTACHMENT 3

Suite 1020
Washington, D.C. 20005
Office 202/326-3815

Ameritech

James K. Smith
Director
Federal Relations

June 20, 1996

Ms. Regina M. Keeney
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W.
Room 500
Washington, DC 20554

Re: CC Docket 91-346
Intelligent Network
Ex Parte Communications

Dear Ms. Keeney:

By this correspondence Ameritech requests the Commission to obtain factual information solely in the possession of equipment vendors concerning unmediated AIN interconnection. This request is predicated on the need to develop a sufficient record in this proceeding.

There has been significant discussion and debate regarding the ability of existing technology to support unmediated interconnection of third party SCPs to a telecommunication network. Ameritech believes there are significant outstanding issues yet to be addressed. At a minimum, the debate indicates a lack of common understanding or agreement on what network messages or procedures would be necessary to allow interconnection of third party SCPs to a public provider's network. For example, the Commission-sponsored Network Reliability Council's (NRC's) AIN Subteam Final Report concludes "... the LECs, other network providers and third party service providers need to work together to define and reach an agreement on the type of third party access needed; and the placement of mediation functionality in the network.".[1] Furthermore, the Subteam recommended that" [t]he industry needs to resolve the uncertainty over what mediation functionality is needed to insure network reliability ...".[2] Thus, it is clear that any mandates for interconnection of third party SCPs with networks is premature.

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[1]Network Reliability Council (NRC), Reliability Issues Changing Technology Focus Group, Advance Intelligent Network Subteam Final Report, January 23, 1996 at p. 32.

[2]Id. at 35. In addition, the IILC (Information Industry Liaison Committee) is addressing "Definition and Criteria for Placement of Logical Interconnection Mediation Functions", Issue 052. The planned output documentation will include typical functions already identified as candidates for inclusion in mediation and the criteria for determining the placement of those functions.

A number of issues have yet to be addressed in the record of this docket:

Accidental or Malicious Messages Can Disrupt Services and Networks.

A specific unmediated AIN message has the ability to shut off a customer's AIN features. Although the message that deactivates a customer's AIN trigger(s) would not interfere with a customer's ability to make or receive calls, it would render any service based on the affected trigger(s) inoperable. It also could cause calls to be processed differently than if the customer's AIN services were working properly. This would result in significant disruptions, not only for businesses, but, more significantly, for law enforcement, emergency, and health care agencies when these services no longer operate as expected.

A different single unmediated AIN message has the potential to shut down AIN services for multiple customers served by a single switch. This message, Automatic Call Gapping (ACG), drops calls that encounter AIN processing. ACG interferes with customers' ability to place and receive calls and, in the worst case, if misapplied, results in denial of dial tone. Clearly, this last example would cause even greater disruption for customers.

Should one of these messages be received by a switch, it would be acted upon immediately, causing loss of functionality, disruption of features and, possibly, total loss of service.

Audit Trails to Determine Liability for Accidental or Malicious Messages Are Unavailable.

To seek remedies for inadvertent, accidental, or malicious events, the network provider needs capabilities to capture the offending message(s) in real time and identify the source conclusively. While unmediated access is one avenue the FCC could choose, an assessment of the network risk and the attendant financial liabilities must be calculated and understood before embarking on this course.

- Recording and storing every SS7 message in our network is impractical. The Ameritech network alone manages over a billion signaling messages each day. Thus, identification and retrieval of offending messages would be impossible.

- The network can neither authenticate nor verify the source of a signaling message. Technology is insufficient to prevent one service provider from assuming the identity of another provider. The originator of an offending message cannot be conclusively determined.

- Network providers cannot identify an offending message and its source. Therefore, network providers would not be able to identify the effects of an offending system. The inability to identify the originator renders it nearly impossible for network providers, their customers, or service providers to request reversal of and reparations for the effects of an offending system's messages.[3]

Technical Feasibility from a Switch Vendor's Perspective.

Confirmation of the potential impacts of inappropriate AIN messages and the inability to conclusively identify the source needs to be sought from manufacturers of switching systems sold in the United States.[4] Such confirmation may also determine the accuracy of various claims made concerning interconnection of third party SCPs.[5] Accordingly, Ameritech requests that the Commission ask AIN switching equipment vendors the following five questions:

1. Can each of your AIN SSP switches distinguish from what source it receives network management messages, such as Automatic Call Gapping (ACG)?

   If yes, can each switch validate the authority of the originator to initiate the specific action (ACG) on the intended network system or element?

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[3] See attachment 1, Joshua Quittner, "Way Wrong Number", Time, April 1, 1996, pg 53.

[4] On its June 3, 1996 conference call, the IILC Issue 052 Task Group heard concerns regarding mediated 3rd party SCP interconnection from a non-LEC participant. The concerns highlight network technical limitations as identified in R&D testing performed by the industry participant. These concerns support the need to expand the record to include input from vendors specific to AIN. See attachment 2, Issue 052 "Definition and Criteria for Placement of Logical Interconnection Mediation Functions", Task Group Conference Call Minutes of June 3, 1996.

[5] As an aside, Ameritech would note that the public and private positions by AT&T differ on the need for mediation. In FCC ex partes, AT&T demanded unmediated access to LEC networks claiming there is no need for mediation when third party SCPs are connected to the LEC network. However, AT&T's May 8, 1996 interconnection request to Ameritech, pursuant to Section 251 of the Telecommunications Act of 1996, recognizes the disruption that unmediated access introduces by requiring Ameritech to protect AT&T's AIN services from interference due to other service providers. Specifically, AT&T requires:

> Network management controls resulting from an overload in elements not supporting AT&T customers shall not affect queries to AT&T SCPs.

2. Does your switch provisioning process automatically prevent the assignment of a trigger when an AIN service using that trigger would interact adversely with a switch-based service or other AIN/IN service?

   If yes, for which triggers might assignment be prevented?

3. Have you documented for customer's use all interactions that can occur between each AIN/IN trigger supported by your product(s) and the switch-based services which your product(s) support?

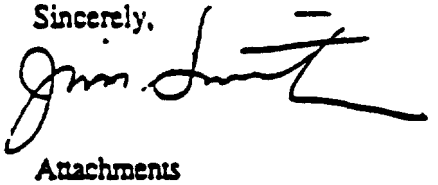
4. To how many different service providers' platforms (not just how many translation types) can each of your AIN/IN SSP/switch products formulate and send queries?

5. Do your AIN/IN SSP switching products fully and without exceptions comply with all the requirements in Bellcore TR-NWT-001284 or any other public standard or requirement?

NOTE: It is important to assure that responses are targeted to the AIN environment rather than the broader SS7 or other signaling transport environment, since SS7 is a transport mechanism and AIN is a distributed processing architecture. This distinction has been an ongoing point of confusion in public forums, shading the true impacts of unmediated access.

Ameritech reiterates its previous position on providing unmediated access by third party SCPs to public networks. Such interconnection raises serious unresolved questions. Limited forms of SMS/SCP access are already supported, and will be expanded in response to legitimate market forces. Ameritech's Bona Fide Request (BFR) process will address new forms of interconnection as they are requested by the market place. The FCC should allow market forces to direct this emerging telecommunications network.

Sincerely,



Attachments

cc: Richard Metzger
John Nakahata
Richard Welch
William Caton, Acting Secretary (two copies)

Way Wrong Number

Hell hath no fury like a city councilman porned

By JOSHUA QUITTNER

THIS IS A TALE ABOUT HOW AN ONLINE prank grows into an international incident. It also goes a long way toward explaining the fear many non-Internet people have about this out-of-control thing called cyberspace.

Our story begins on the banks of Lake Erie, in Willowick, Ohio (pop. 15,459). It is the last Monday night in January, about 8 o'clock. City councilman Frank Suponcic is home with his wife Linda when the phone rings. Linda answers. "Hi, this is Mike," says the man at the other end, politely enough. Linda chats with Mike, figuring he must be a constituent. (As Willowick's longest-serving ward councilman, Suponcic has lots of voters calling him at home.) After a while, Mike asks for Amanda. Linda tells him he has the wrong number. Mike apologizes and hangs up.

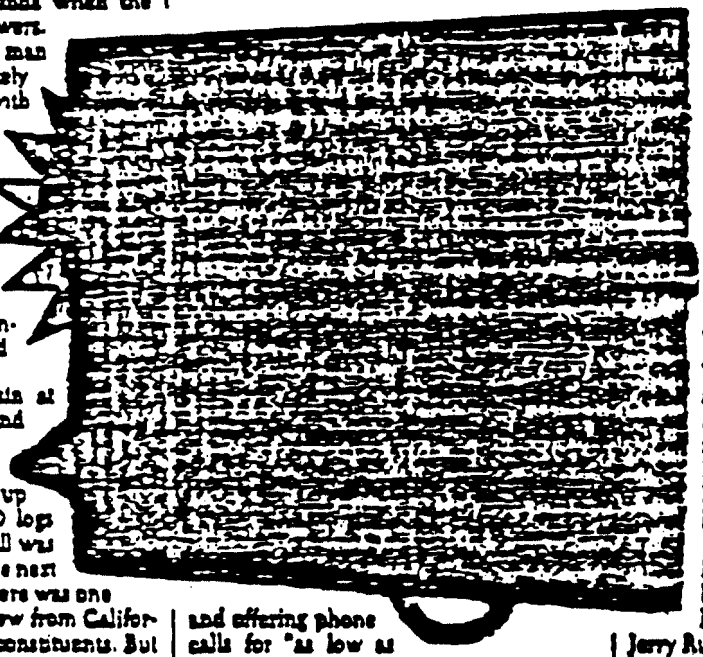
The phone rings again at 11:30 p.m. And again. And again. Wrong numbers until 4:30 a.m. A weary Suponcic wonders what's up and checks the Caller-ID logs on his phone. The first call was from British Columbia. The next was from Connecticut. There was one from Indianapolis and a few from California. Clearly these are not constituents. But who are they?

Suponcic calls the Canadian back—it is now 8:30 a.m. in that time zone, and he is only too happy to wake the dude up—and he demands to know what is going on. The guy explains, vaguely, that he was merely answering an "ad on the Internet. You know, the one about horny housewives ..."

So now we have a problem. Suponcic, like a lot of people, has a new computer. But like most people, he hardly knows what the Internet is. Now, somewhere there's an ad on it. For horny housewives. With his home phone number.

That night, when the next wrong number came in, Suponcic interrogated the caller and learned that the councilman's phone number was printed at the bottom of some pictures of naked women that had been posted to a Usenet newsgroup called *alt.binaries.pictures.erotica*, which, naturally, Suponcic had never heard of. But he had a friend in Cleveland who was something of a computer buff. So the next day the two of them jacked into Usenet and spent three hours sifting through about 7,400 files on *alt.binaries.etc*.

Eventually, they found two with Suponcic's phone number. One featured a topless brunet wearing only a string of pearls and offering phone calls for "as low as 87¢ per minute." The other showed a blond woman advertising "hot amateur wives ready for you from there (sic) own bed." Yikes.



Over the next week, Suponcic received more than 75 calls a day from lusty Netizens. "You just could not make phone calls," says the exasperated councilman. "And when you went to bed, you had to take your phone off the hook."

It was the sorcerer's apprentice scenario, and there was no way to stop it.

Suponcic, being a public official, knew his way around the local police department, and soon a detective started pounding the Net. By tracing the header information on the Usenet postings, the detective determined—O.K., this part is murky, we admit—that the messages had originated in Ohio, passed through Florida Online, an Internet provider in the Sunshine State, and then through *anon.penet.fi*, a free E-mail remailer service based in Finland that allows Internet users to post messages anonymously.

The identity of the poster was, and is, unknown, though Suponcic has his suspicions. "It's my personal belief that the root of this is political," says the councilman, who had to get an unlisted telephone number and whose wife now wants to move.

On Feb. 6, at Suponcic's urging, the Willowick city council passed a resolution asking the state and federal governments to close the "loopholes" that allowed anonymous remailers to operate outside the authority of U.S. law-enforcement officials.

"Once you've achieved one of these anonymous identities, you're dangerous, and there's no way law enforcement can track it," Suponcic says. "The animal's out of control."

Still not content, Suponcic contacted Steven LaTourette, the U.S. Congressman who represents his district. LaTourette's staff suspects that the problem lies with Julf Helsingius, the Finn who runs the anonymous remailer. They wrote a letter to the Finnish ambassador and sent copies to the Secretary of State and the chairman of the House Committee on International Relations. The State Department agreed last week to look into the complaint.

r here!

But here's a reality check. The Finnish remailer could not have been used, since *anon.penet.fi* no longer transmits binary image files. Jerry Russell, who runs Florida Online and who looked into the case, says he figures the whole thing was a relatively simple prank called a sendmail spoof, in which the prankster posts a message with a phony return address. He says the Willowick police never produced a copy of the posting for him so that he could unravel the tangle for them. Indeed, when the policeman called, "he didn't really understand what he was trying to tell me," says Russell. "The average Joe Blow police detective doesn't know flip about the Internet."

Neither does the average public official. And that, friends, is why stuff like the Communications Decency Act—the Christian Coalition's attempt to remove pornography from the Internet—sails through Congress. —*With reporting by Noah Robinson/New York*

ISSUE 052 "Definition and Criteria for Placement of Logical Interconnection Mediation Functions"

June 3, 1996

TASK GROUP CONFERENCE CALL

1. Agenda
Discuss letter sent from Access Point Communications Corp. to 052 Task Group regarding concerns surrounding mediation.

2. Participants

George Stanek (Non LEC Co-Champion)	AT&T
Chris Maglott (LEC Co-Champion)	Ameritech
Jerry Anaskewich	Telesrends
Carey Caldwell	SWBT
Don Davis	BellSouth
Mike McLaughlin	TeleHub Comm. Corp.
Mike Pedersen	Bellcore
Don Radovich	U S WEST
Jerry Saucier	BellSouth
Bill Sund	TeleHub Comm. Corp.

Action items in italics

3. Discuss letter sent from Access Point Communications Corp. to 052 Task Group regarding concerns surrounding mediation

George Stanek opened the discussion and noted that the conference call would be to discuss the letter sent to Chris Maglott from Michael McLaughlin, Access Point Communications Corp. (d/b/a TeleHub Communications Corporation) on May 14, 1996. George asked Mike McLaughlin to give a brief overview of what was contained in the letter and what he would like the 052 Task Group to do in response.

Mike McLaughlin explained that his company was a provider of technology to the telecommunications market and also a service platform provider. Mike noted that his firm is involved in the R&D process of mediation. Mike suggested that his company was in a position to provide issues that were encountered in the laboratory when testing various processes of mediation. Mike noted that 75% of the major hardware vendor platforms, represented as tested and working, do not work when tested in the laboratory. Mike indicated that vendors have not fully covered some of the major management and billing issues necessary to have true platform mediation capabilities.

Mike suggested that once companies start deploying applications to interexchange carriers (IXCs) and local exchange providers, and IXCs and LECs open their networks to each other, a lot of the mediation functions which are represented as working, may not work when they are connected to a live network. Mike suggested that the Task Group could set up scenarios to describe issues that were covered in the laboratory environment. Mike suggested that the IILC could be used as a sounding board to address the problems encountered in the laboratory and possibly to reach agreement on the proper methods for the deployment of mediation in the various network environments. Mike suggested that if a mediation function is being proposed to be provided by a service provider, they would need a common understanding of how to introduce that mediation function and how it would be provided. Mike suggested that a manual with a step-by-step procedure, or a common set of rules could be developed for the introduction of new mediation functions, especially in a network with multi-level signalling capabilities, by service providers.

George Stanek asked Mike McLaughlin if he had identified some issues that he could share with this Task Group. In response, Mike indicated that he had identified some issues regarding mediated access that the Task Group had not identified. Chris Maglott suggested that Mike provide his list of issues to the Task Group for discussion. In response, Mike indicated that some of the issues that his company has worked on are proprietary, but he was in the process of creating a list of non-proprietary issues for Task Group discussion. George Stanek asked Mike if the list of issues get into the criteria of Issue 052 and impact Issue 053. In response, Mike indicated that the list of issues may go into both issue 052 and 053, and may even create another IILC issue. Mike indicated that it would take about two and one-half weeks to develop a draft list of these issues.

4. Next Steps

A question was raised as to whether the Task Group should hold off doing any further work until the Task Group gets a chance to see the list and whether initial closure should be postponed until November. After some discussion it was decided to hold off any further work until the Task Group sees the draft list of issues. It was also suggested that initial closure could be postponed until November. It was suggested that the Task Group will benefit from the new input which can be integrated into the work which has already been completed. It was noted that the information contained in a contribution can be merged into existing documentation. It was suggested that the Access Point contribution would be accepted by the Task Group and be put in the close-out documentation as a contribution from Access Point.

Don Davis suggested that if the Task Group goes into more detail with some of the potential mediation functions and logical request definitions, which are now high level definitions, then the Task Group may have to modify other areas with more detail.

After some discussion, it was decided that we would need two conference calls after we get the criteria from Access Point. It was noted that this would put us past the time to get initial closure material in the pre-meeting package. *It was decided to leave the issue of whether to go for initial closure until the next conference call on June 28, which would be after the Task Group has looked at the Access Point contribution.*

Mike McLaughlin will send the completed draft list of issues that he has identified for discussion by the 052 Task Group to the Task Group members before the June 28 conference call.

As a result, the two conference scheduled conference calls were canceled and two others were rescheduled as follows:

June 11, 1996 - Canceled
June 24, 1996 - Canceled
June 28, 1996 - Added
July, 23, 1996 - Added

5. Next Conference Call
The next conference call is scheduled for June 28, 1996 at 2:00 PM EDT. Details to follow.

mike

Mike Pedersen
Open Network Architecture

ATTACHMENT 4

EX PARTE OR LATE FILED

Washington D C 20005
Office 202/326-3815

DOCKET FILE COPY DUPLICATE

Ameritech

James E. Smith
Director
Federal Relations

March 14, 1996

RECEIVED

MAR 14 1996

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW
Room 222
Washington, DC 20554

Re: Ex Parte Statement
Docket 91-346

Dear Mr. Caton:

On March 13, 1996, Mr. Terry Appenzeller, Vice President - Open Market Strategy, Ms. Marie-Ellen Hull, Product Manager - Unbundling, Mr. Wayne Heinmiller, Manager - AIN Technology Planning and I met, in separate meetings, with Mr. John Nakahata, Special Assistant to Chairman Hundt, Mr. Jim Casserly, Senior Legal Advisor to Commissioner Ness, Mr. Todd Silbergeld, Legal Advisor to Commissioner Barrett and Mr. Richard Metzger, Deputy Bureau Chief, Common Carrier Bureau to discuss Ameritech's position in the above referenced proceeding. The attached presentation was used as the basis of our discussion.

Sincerely,

Attachment
cc: J. Casserly
R. Metzger
J. Nakahata
T. Silbergeld

Ameritech

Advanced Intelligent Network

Docket 91-346

The Evolution of the Market

CURRENT LEVEL OF PHYSICAL UNBUNDLING:

- Third Parties choose method for offering intelligent services
- Telecommunications Act has paved the way to open all networks, nationally
- Market demand supports physical interconnection

RESALE:

- Meets the needs of the non-facilities based local exchange provider
- Requires ways to differentiate service offerings in a competitive environment

Solution: Access to AIN service creation provides one method for resellers to offer distinct services

Ameritech SMS/SCE Unbundling Plan

The Plan:

- Enables third party service providers to offer services using the existing Ameritech Advanced Intelligent Network
- Provides the infrastructure for rapid service creation and comprehensive testing in a fully functional lab prior to deployment

Consumer & Third Party Benefits:

- New services developed & deployed with minimal capital investment
- Increased choice of services & providers
- Responds to REAL market and consumer needs
- Third parties integrated into network seamlessly
- Minimizes risk to network integrity and reliability
- Available 1996